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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/486,797	02/28/2000	HARALD WEGENER	POO,0047	6201

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EXAMINER	
LAMB, TWYLER MARIE	
ART UNIT	**PAPER NUMBER**
2622	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/486,797	WEGENER, HARALD	
	Examiner	Art Unit	
	Twyler M. Lamb	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 February 2000* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Specification

1. Due to the extensive changes made to the specification by the preliminary amendment, a substitute specification is requested.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 1 recites the limitation "the printer-specific data format" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 15 recites the limitation "the data stream" in lines l and 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 21 recites the limitation "said overlay information" in line l. There is insufficient antecedent basis for this limitation in the claim.

Claims 2-14 and 16-20 are rejected because they depend on a rejected base claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1, 2 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Luther et al. (Luther) (US 5,721,940).

With regard to claim 1, Luther discloses a method for electronic archiving of a data stream output by a computer (which reads on producing form dictionary) (col 4, lines 33-34) in a computer-specific data format (col 5, lines 1-4) that contains at least one of graphic information and text information (col 5, lines 7-9), comprising the steps of: distinguishing form data from variable data in the data stream (which reads on identifying the type of information as text, graphic, etc.) (col 5, lines 4-9); and differently processing the data types (which reads on routing to appropriate processing station based on identity) (col 6, lines 43-47).

With regard to claim 2, Luther also discloses further comprising the step of: allocating references to the form data to the variable data (which reads on forming a blank form) (col 4, lines 58-63).

With regard to claim 5, Luther also discloses further comprising the step of: seeking form indicators for recognizing form data in the data stream (col 7, lines 1-13).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 3 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luther et al. (Luther) (US 5,721,940)in view of Tanaka (US 4,944,614).

Luther differs from claim 3 in that he does not clearly teach further comprising the steps of: storing a form data sheet of identical form data only once within a predetermined data group storing all allocated variable data of all datasets of the data group.

Tanaka discloses a form overlay type document printing system that includes further comprising the steps of: storing a form data sheet of identical form data only once within a predetermined data group (col 2, lines 45-49) and storing all allocated variable data of all datasets of the data group (col 2, lines 39-41).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther to include further comprising the steps of: storing a form data sheet of identical form data only once within a predetermined data group and storing all allocated variable data of all datasets of the data group as taught by Tanaka. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther by the teaching of Tanaka to ensure that the variable data will be changed upon completion of printing while maintaining the form data as is as taught by Tanaka in col 3, lines 6-12.

With regard to claim 6, Luther differs from claim 6 in that he does not specifically teach further comprising the steps of: investigating data of the data stream in groups for form data, and allocating between the variable data and the form data only given repeated occurrence of form data.

Tanaka discloses a form overlay type document printing system that includes further comprising the steps of: investigating data of the data stream in groups for form data (col 2, lines 35-44), and allocating between the variable data and the form data (col 2, lines 35-44) only given repeated occurrence of form data (col 2, lines 45-49).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther to include further comprising the steps of: investigating data of the data stream in groups for form data, and allocating between the variable data and the form data only given repeated occurrence of form data as taught by Tanaka. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther by the teaching of Tanaka to

ensure that the variable data will be changed upon completion of printing while maintaining the form data as is as taught by Tanaka in col 3, lines 6-12.

With regard to claim 7, Luther differs from claim 7 in that he does not clearly teach further comprising the step of: using overlay information as form indicators (which replacing the variable data while the form data remains as is (col 3, lines 7-17).

Tanaka discloses a form overlay type document printing system that includes further comprising the step of: using overlay information as form indicators.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther to include further comprising the step of: using overlay information as form indicators as taught by Tanaka. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther by the teaching of Tanaka to ensure that the variable data will be changed upon completion of printing while maintaining the form data as is as taught by Tanaka in col 3, lines 6-12.

With regard to claim 8, Luther differs from claim 8 in that he does not clearly teach further comprising the steps of: storing a form dataset after a first occurrence within the predetermined data group of the data stream; and only marking data as s form dataset, converting the data into a form bitmap and allocating the data to an appertaining variable dataset after a repeated occurrence.

Tanaka discloses a form overlay type document printing system that includes further comprising the steps of: storing a form dataset after a first occurrence within the predetermined data group of the data stream (col 2, lines 45-49); only marking data as s

form dataset (which reads on discriminating form data) (col 2, lines 35-41); and converting the data into a form bitmap and allocating the data to an appertaining variable dataset after a repeated occurrence (col 3, lines 6-17).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther to include further comprising the steps of: storing a form dataset after a first occurrence within the predetermined data group of the data stream; and only marking data as s form dataset, converting the data into a form bitmap and allocating the data to an appertaining variable dataset after a repeated occurrence as taught by Tanaka. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther by the teaching of Tanaka to ensure that the variable data will be changed upon completion of printing while maintaining the form data as is as taught by Tanaka in col 3, lines 6-12.

With regard to claim 9, Luther differs from claim 9 in that he does not clearly teach further comprising the steps of: with a work sequence, implementing at least one of printing and archiving.

Tanaka discloses a form overlay type document printing system that includes further comprising the steps of: with a work sequence, implementing at least one of printing and archiving (which reads on maintaining the form data as is after printing) (col 3, lines 6-17).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther to include further comprising the steps of: with a work sequence, implementing at least one of printing and archiving as taught

by Tanaka. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther by the teaching of Tanaka to ensure that the variable data will be changed upon completion of printing while maintaining the form data as is as taught by Tanaka in col 3, lines 6-12.

9. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luther et al. (Luther) (US 5,721,940)in view of Casey et al. (Casey) (5,140,650).

With regard to claim 4, Luther differs from claim 4 in that he does not clearly teach wherein said step of distinguishing between form data and variable data ensues in the printer-specific data format.

Casey discloses a machine implemented method of extracting characters that includes wherein said step of distinguishing between form data and variable data ensues in the printer-specific data format (col 3, lines 43-61).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther to include wherein said step of distinguishing between form data and variable data ensues in the printer-specific data format as taught by Casey. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther by the teaching of Casey to ensure easy manipulation by the CPU and storage in the peripheral device as taught by Casey in col 3, lines 43-61.

10. Claims 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luther et al. (Luther) (US 5,721,940)in view of Casey et al. (Casey) (5,140,650).

With regard to claim 15, Luther discloses a method for electronic archiving of a data stream output by a computer (which reads on producing form dictionary) (col 4, lines 33-34) that contains at least one of graphic information and text information (col 5, lines 7-9), comprising the steps of: distinguishing form data from variable data in the data stream (which reads on identifying the type of information as text, graphic, etc.) (col 5, lines 4-9); and differently processing the data types (which reads on routing to appropriate processing station based on identity) (col 6, lines 43-47).

Luther differs from claim 15 in that he does not clearly teach outputting the data from a computer in a printer-specific data format.

Schanding discloses a method or reducing direct memory in a machine employing a data segmenting scheme that includes outputting the data from a computer in a printer-specific data format (col 3, lines 39-43).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther to include outputting the data from a computer in a printer-specific data format as taught by Schanding. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther by the teaching of Schanding to cause the print mechanism to execute a print operation as taught by Schanding in col 3, lines 55-58.

With regard to claim 16, Luther as modified differs from claim 16 in that he does not clearly teach further comprising a printer controller that transfers variable data, form data and index data to a further-processing computer via an interface.

Schanding discloses a method or reducing direct memory in a machine employing a data segmenting scheme that includes further comprising a printer controller that transfers variable data, form data and index data to a further-processing computer via an interface

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther to include further comprising a printer controller that transfers variable data, form data and index data to a further-processing computer via an interface as taught by Schanding. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther by the teaching of Schanding to cause the print mechanism to execute a print operation as taught by Schanding in col 3, lines 55-58.

With regard to claim 17, Luther as modified differs from claim 17 wherein said print controller includes a further-processing computer integrated in the printer controller.

Schanding discloses a method or reducing direct memory in a machine employing a data segmenting scheme that includes wherein said print controller includes a further-processing computer (processor 120) integrated in the printer controller (col 3, lines 59-61).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther to include wherein said print controller includes a further-processing computer integrated in the printer controller taught by Schanding. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther by the teaching of Schanding to cause the print mechanism to execute a print operation as taught by Schanding in col 3, lines 55-58.

With regard to claim 18, Luther as modified also discloses wherein said archiving interface is operable to make a distinction between form data and variable data (which reads on identifying the type of information as text, graphic, etc.) (col 5, lines 4-9).

With regard to claim 19, Luther also discloses wherein the data stream is investigated in the printer-specific data format for distinguishing form data and variable data (which reads on identifying the type of information as text, graphic, etc.) (col 5, lines 4-9).

With regard to claim 20, Luther as modified differs from claim 20 in that he fails to clearly teach further comprising the step of: converting a data stream is converted from the printer-specific data format into a data format based on pixels.

Schanding discloses a method or reducing direct memory in a machine employing a data segmenting scheme that includes further comprising the step of: converting a data stream is converted from the printer-specific data format into a data format based on pixels (col 3, lines 43-47).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther to include further comprising the step of: converting a data stream is converted from the printer-specific data format into a data format based on pixels as taught by Schanding. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Luther by the teaching of Schanding to cause the print mechanism to execute a print operation as taught by Schanding in col 3, lines 55-58.

With regard to claim 21, Luther as modified also discloses wherein said overlay information is selected from the information consisting of control information, macro information, graphic information, predetermined text modules and predetermined text attributes (which replacing the variable data while the form data remains as is (col 3, lines 7-17)

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Twyler Lamb whose telephone number is (703) 308-8823.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, DC 20231

or faxed to:

(703) 872-9314

(for informal or draft communications, such as proposed amendments to be discussed at an interview; please label such communications "PROPOSED" or "DRAFT")

or hand-carried to:

Crystal Park Two
2121 Crystal Drive
Arlington. VA.
Sixth Floor (Receptionist)

Twyler Lamb

September 30, 2002

MARK WALLERSON
PRIMARY EXAMINER